

INFLUENCE OF DISPOSITIONAL FACTORS ON PERCEPTION OF ACADEMIC COMPETENCE AMONG UNDERGRADUATE STUDENTS

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Abstract

The study examined the influence of age, gender and self-concept on students feeling of satisfaction and competence within a university setting. Three hundred undergraduate students participated in the study through a random survey. Their ages range was between 19 and 25 years, and their mean was 23.54 years. The Pearson coefficient and multiple regressions at 0.05 alpha level of significance were the statistics used to test the set hypotheses. The findings revealed a non-significant relationship between age and perception of academic competence while gender as well as self-concept showed a significant positive relationship respectively with perception of academic competence. The findings further indicated that the dispositional variables: age, gender and self-concept, considered in this study showed a significant positive regression on perception of academic competence. The results of the study and their implications were discussed, recommendations and suggestions for further study were made.

Keywords: Academic competence, Self-concept, Age, Gender, Students, Nigeria.

INTRODUCTION

Academic competency is a measure of how students cope with academic course load and whether they understand what is taught in the course. Perception of academic competence relates to the way one views his or her competence or ability within the academic realm. A healthy perception of academic competence will probably lead to a sound academic competence and confidence. Academic competence may be linked to both adolescents' motivation to succeed in school as well as academic performance. According to Henderson and Dweck (1990); Marsh and Bryne (1999); Harter, Runbaugh, Whitesel and Kavalski (1992), academic competence is considered an important component of an adolescents' educational well being. Wylie (1970), also argued that students' perception of themselves within school environments plays a key role in the learning process either as a contributing factor or as an important outcome. Existing studies (Russell, 2002; Sansgiry, Kavatkar, Dutta and Rholve, 2004) have examined and revealed that factors outside the individuals such as peer interactions, assignments, marks and grades, lecturers feedback, gains in knowledge and skill and academic progression are related with, the perception of academic competence. Yet lacking is gender and self-concept in

the perception of academic competence. There is the need, therefore, to extend the study to include the factors within the individual in order to shade more light and fully understand the implication of such factor on educational setting. The study therefore intends to examine the influence of individual dispositional factors such as age, gender and self-concept in perception of academic competence. Self-concept refers to one's evaluation of him or herself in academic setting. Self-concept and academic achievement are positively related. A student who has positive evaluation of him or herself tend to feel at ease, more motivated, concentrated, focused and capable of studying easily and retaining information longer. A positive self-concept is valued as a desirable outcome in educational setting. Marsh (1990a); Shavelson and Bolus (1982), found that positive self-concept is a mediating factor in the attainment of desirable outcomes such as academic achievement and positive evaluation of academic competence. Educational policy statements list the development of a positive self-concept as a factor that cannot be denied, and with a positive self-concept, the movement towards successful life can be achieved. This correlates with the self-fulfilling prophecy concept.

Age and previous educational experience are also considered as important factors influencing the perception of academic competence. The students' enrolment in recent time has tilted towards the age of youngsters as against the adult age as was the case in the past. Kasworn (1990) termed this youth age and adult age, the non-traditional age and traditional age respectively, which has stimulated research comparing their experience. According to Graham and Donaldson (1999), adult students are more purposeful and tend to take studies more serious than the adolescent ages. Ashkar and Skenes (1993); Graham and Donaldson (1999); Justice and Dornan (2001) found that mature

students are more likely to have made a definite career choice and more likely to have a clear understanding of the course of study they follow and have perceptions as to how the academic content will contribute to their ability to excel in life. Youths on the other hand take up course of study while still deciding what they want to do in life. Ashkar and Skenes (1993) argued that most adults enrolling in schools by and large do so because of career enhancement reasons rather than for an intellectual need for self-development. Borgs (1995); Graham and Donaldson (1999); Justice and Dornan (2001), and Kasworn (1990) found that adult students are usually more motivated and tend to bring life experiences to class that enhance their learning and perception of academic competence.

Gender is also one of the factors in this study considered to influence the perception of academic competence. Males are socialized to be more powerful, assertive, dominant, and authoritative than females and tend to extend these attributes to life endeavors including academics settings (Calvert & Huston, 1987). There is greater concern with boys' cognitive development and the message is that girls are less expected to shine intellectually. Males are socialized to be more aggressive, assertive, active and competent than females who have been portrayed as submissive, inactive and interested mainly in either keeping house or becoming more beautiful (Mamay & Simpson, 1981; Zuckerman & Zuckerman, 1985). Coppersmith (1967) found that boys with positive self-concept were more popular and did better in schools than girls with positive self-concept. Individuals who are self-confident, cooperative and competent are easily amenable and likely to have a good perception of academic competence. The purpose of this study is therefore to examine the influence of age, gender and self-concept on perception of academic competence among the undergraduate

students. Answers will be sought to the following research questions in this study: 1.) What is the relationship between age, gender, self-concept and perception of academic competence among the undergraduates? 2.) What is the relative contribution of age, gender and self-concept to the perception of academic competence? In order to achieve the objectives of this study, the following hypotheses will be tested at the .05 level of significance.

H.1. There will be a significant positive relationship between age, gender, self-concept and perception of academic competence.

H.2. Age, gender and self concept will significantly and jointly influence the perception of academic competence.

METHOD

Participants

In all, 300 out of the initial 350 undergraduates of Madonna University participated in the study. The students were randomly sampled from the faculty of social sciences made up of Economics, Political Sciences, Sociology and Psychology Departments. They comprise 190 females and 110 males whose ages ranged from 19 to 25 years, with their average age 23.54 years.

Instruments

The questionnaire was the instrument used to obtain the data for the study. Section A of the instrument sought information on socio-demographic variables such as age, gender, etc. Section B sought information on self-concept and perception of academic competence.

Self-Concept

Self-concept was measured using 17 item scale adapted from Purkey's (1998) modified version of Bedsoe self-concept scale, measuring school self concept. The scale

was scored by assigning a weight of 3 to the column marked "Nearly always", a weight of 2 was assigned to the column marked "Not really" and a weight of 1 was assigned to the column marked "Just now and then". The negative words were scored in a reverse order i.e. 3 for "Just now and then", 2 for "Not really", and 1 for "Nearly Always". Each individual's rating for the 17 items formed a single self-concept score. For the present study, the Cronbach alpha co-efficient of .63 was obtained.

Academic Competence

Academic competence was measured with a 15 item scale developed and validated for the study. The 15 item scale measures the extent to which a student perceives his or her academic ability in terms of understanding the course contents of studies, passing of examinations, CGP, taking lecture notes in the class, contribution to class discussion during lectures, and general academic competence. All the items were constructed on a three point scale: 3—Agree (A); 2 = Undecided (U); and 1 = Disagree (DA). The respondents were to indicate their degree of agreement with each item by ticking one of the options for each item. The items were summed linearly to obtain the scale scores. For this study, a test-retest reliability of 0.76 was obtained with 2 weeks of administration. The Cronbach alpha of 0.77 was also obtained for the study.

Procedure

On the whole, 350 questionnaires were distributed to the undergraduate students of the Faculty of Social Sciences that comprises Economics, Political Science, Sociology and Psychology Departments of Madonna University during their lectures. Out of the 350 questionnaires distributed, 300 were completely filled. This gave a response rate of 85.71%. The questionnaire

were coded and data collected were analyzed by employing Pearson's Product Moment Correlation's technique and Multiple Regression analysis. The set hypotheses were tested at the 0.05 level of significance.

RESULTS

Table 1 presents the mean, standard deviations and correlation coefficients between academic competence and the predictor variables: age, gender and self-concept. A look at the table reveals that age and perception of academic competence have a non-significant positive relationship ($r = .045$; $P > .05$); gender and perception of academic competence have a significant positive relationship ($r = .20$, $P < .05$) and self-concept and perception of academic competence also have a significant positive relationship ($r = .47$, $P < .01$).

Table 1: Mean, Standard Deviation and Correlation Coefficient between Perception of Academic Competence and the Variables of study.

| S/N | Variable | 1 | 2 | 3 | 4 |
|-----|---------------------|-------|-------|-------|-------|
| 1 | Age | 1.00 | | | |
| 2 | Gender | 0.34 | 1.00 | | |
| 3 | Self-Concept | 0.046 | 0.065 | 1.000 | |
| 4 | Academic Competence | 0.045 | 0.30 | 0.58 | 1.00 |
| | Mean Value | 7.85 | 10.66 | 43.41 | 34.94 |
| | Standard deviation | 2.51 | 1.48 | 5.77 | 5.08 |

* Significant at the 0.05 level

** Significant at the 0.01 level

Table 2 shows a joint contribution of the dispositional variables:- age, gender, and self-concept in predicting perception of academic competence. As can be seen, the three variables yielded a coefficient of multiple regression R of 0.499 and a multiple R-square (R^2) of 0.249. This indicates that the three variables jointly showed significant positive regression of 0.499 on perception of academic competence. The R^2 value translated into 25% of the observed variance in

perception of academic competence. This indicated that 25% of the variance observed in the perception of academic competence was accounted for by the joint influence of the three variables, while 75% was as a result of other factors other than the three variables. The table also shows that analysis of variance for the multiple regression data produced an F-ratio of 12.706 which is significant at the 0.001 level.

Table 2: Summary of Multiple Regression Analysis between the Predictor Variables and Perception of Academic Competence.

| Variable | Beta (B) | t value | S Error | Significant |
|--|----------|---------|---------|-------------|
| Age | 0.039 | 0.46 | 0.87 | >.05 |
| Gender | 0.184 | 2.14 | 0.92 | <.05 |
| Self-concept | 0.457 | 5.64 | 0.07 | <.01 |
| Multiple R (Adjusted) = 0.499 | | | | |
| Multiple R ² (Adjusted) = 0.249 | | | | |
| Standard Error of Estimate = 4.46 | | | | |
| F value = (3,266) = 12.71, P<.001 | | | | |

Table 2: shows the standardized regression weight. Beta (B) which is the weight of the contribution of each of the variables in the joint prediction of perception of academic competence reveals that with a beta weight of 0.039, age contributed 4% of the shared variance ($B = 0.039$; $t = -0.457$; $P > .05$) which was not significant. Further, as revealed in table 2, with a beta weight (B) of 0.184, gender contributed 18% of the shared variance to the prediction of academic competence ($B = 0.184$; $t = 2.142$; $P < .05$) which was significant. Also, with a beta weight (B) of 0.457, self-concept contributed 46% of the shared variance to the prediction of perception of academic competence ($B = 0.457$; $t = 5.644$; $P < .01$), which was also significant.

DISCUSSION:

The findings of this study revealed a non-significant relationship between age and perception of academic competence. This is contrary to the prediction from research that adult students are more purposeful

and tend to take studies more seriously than the adolescent ones (Graham & Donaldson, 1999). The result is also contrary to the research findings of Burns (1995); Justice & Dornan (2001); and Kasworn (1990) that adult students are more motivated and tend to bring life experiences to class that enhance their learning and perception of academic competence. This pattern of result could be explained in the level of motivation of students. A well motivated student, whether adult or adolescent study hard to enhance learning and perception of academic competence. On the other hand, the findings of this study revealed a significant positive relationship between gender and perception of academic competence. This result is however consistent with the research findings of Mamay & Simpson (1981); Zuckerman & Zuckerman (1985) that males are socialized to be more aggressive, assertive, active and competent than females who are socialized to be submissive, inactive and mainly interested either in keeping house or becoming more beautiful. In terms of self-concept, the present result suggests a significant positive relationship between self-concept and perception of academic competence. This pattern of result is however consistent with the research findings that self-concept and academic achievement are positively related. It is also in agreement with the finding of Marsh (1990a); Shavelson & Bolus (1982) that positive self-concept is a factor in the attainment of academic achievement and good evaluation of academic competence. The finding of this study further revealed that 25% of the variance in the perception of academic competence was accounted for by the dispositional variables of age, gender and self-concept. This indicates that 75% of proportion of the variance in the perception of academic competence was unexplained by the current data. This may explain the reasons for the existence of significant relationship between peer

interactions, assignment, marks and grades, lecture feedback, gains in knowledge and skill, academic progression and perception of academic competence (Russell, 2002; Sansgiry, Kawatkar, Dutta & Bholshe, 2004).

Recommendations

The results of this analysis showed that healthy and good evaluation of oneself in school is associated with perception of academic competence. To enhance good evaluation of oneself in school leading to perception of academic competence, it is therefore pertinent to recommend that cooperative learning strategies, social integration, greater student participation in discussion and more interactive and constructive ways to give students positive feedback should be encouraged and promoted in tertiary institutions.

Suggestions for further study:

Since the dispositional factors considered in this study could only account for 25% proportion in the prediction of academic competence, other dispositional factors as neuroticism, extroversion-introversion, positive affectivity and so on should be studied to see their contribution in prediction of academic competence.

Conclusion

The results of this study have demonstrated that age, gender and self-concept collectively predicted perception of academic competence. When considered separately, age could not significantly predict perception of academic competence; gender and self-concept, however, significantly predicted perception of academic competence.

References

- Ashar, H. & Skenes, R. (1993). Can Tinto's Students Departure Model be Applied to Non-traditional students? *Adult Education Quarterly*, 43(2), 90-100.
- Borns, R. (1995). Motivation and Personality. In *The Adult Learner at Work*. Business and Professional Publishing.
- Calvert, S. L. & Hutson, A. C. (1987). Television and Children's gender schemata. In L. S. Liben & M. L. Singnorella (Eds), *Children Gender Schemata*. San Francisco: Jossey-Bass.
- Coppersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: Freeman.
- Graham, S. & Donaldson, J. F. (1999). Adult Students' Academic and Intellectual Development in College. *Adult Education Quarterly*, 9 (3), 147-161.
- Harter, S; Runbaugh; Whitesell, N. & Kowaiski, P. (1992). Individual Differences in the Effects of Educational Transition on Young Adolescent Perception of Competence and Motivational Orientation. *American Educational Research Journal*, 29, 777-807.
- Henderson, V. I. & Dweck, C. S. (1990). Motivational and Achievement. In S. S. Feldman & G. R. Elliott (eds). *At the threshold: The development adolescent*, Cambridge, M. A: Harvard University press, 308-330.
- Justice, E. M. & Dornan, T. M. (2001). Metacognitive Differences between Traditional age and Non-Traditional age college students. *Adult Educational Quarterly*, 51 (3), 236-249.
- Kasworm, (1990). Adult Undergraduates in Higher Education. A Review of Past Research Perspectives. *Review of Educational Research*, 60, 354-372.
- Mamay, P. D. & Simpson, P. L. (1981). Three Female Roles in Television Commercials. *Sex Roles*, 7 (12), 223-232.
- Marsh, H. W. & Bryne, B. M. (1999). Causal ordering of Academic Self-Concept and Achievement. Reanalysis of a Pioneering Study and Revised Recommendations. *Educational Psychologists*, 34, 135-148.
- Marsh, H. W. (1990a). Causal ordering of Academic Self-Concept and Academic Achievement: A Multiwave longitudinal Panel Analysis. *Journal of Educational Psychology*, 82, 646-656.
- Purkey, W. W. (1998). The Search for Self: Evaluating Students Self-Concept. *Bulletin of Florida Research, Educational Research and Development council*, 4, 2.
- Russell, B. (2002). Factors Perceived by Students in the College of Education as Influencing Academic Self-Concept. Paper presented at the Australian Association of Research in Education Conference Brisbane. *Asia Pacific Journal of Research*, London: The Falmer Press, 8-22.
- Sansgiry, S. S; Kawatkar, A. A; Dutta, A. P. & Bhols, M. J. (2004). Predictors of Academic Performance at Two Universities: The Effects

of Academic Progression. *Journal of Educational Psychology*, 82, 51-59.

Shavelson, R. J. & Bolus, R. (1982). Self-Concept: The Interplay of Theory and Methods. *Journal of Educational Psychology*, 74, 3-17.

Wylie, R. C. (1970). *The Self-Concept*. Lincoln/London: University of Nebraska press.

Zuckerman, D. M. & Zuckerman, B. S. (1985). Television Impact on Children. *Pediatrics*, 75 (2), 233-240.

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